HOWARD COUNTY COURTHOUSE

Spending Affordability Advisory Committee

December 20, 2016

Introduction to the Court House project

Introduction to alternative delivery models and P3s

Identification of delivery models for the Court House

Initial comparison of delivery models for the Court House

Next steps

Project Purpose and Need

- **Background:** The County's existing courthouse was built one and half centuries ago (1840-1843) with a few renovations/additions in 1938, 1965, and 1983. The building has become increasingly unable to cope with growing public needs, Federal and state mandates, and technological requirements.
- **Population growth**: Since the 1983 addition, the County population has grown by more than 142%, increasing demand on all court services.
- **Caseload growth**: Since 2005 non-domestic cases have grown by 10%, civil domestic cases by 20% and reopened case by 50%. The complexity of the cases also increased with longer duration.
- **Public accessibility issue**: With hundreds of visitors each day, the courthouse has too small a parking lot, only one elevator, and lacks wheel chair accessibility due to old design and limited capacity.
- **Security concerns:** Adequate spaces to accommodate security needs at courthouse entrances, hallways and in courtrooms is needed. There is a lack of an enclosed inmate Sally Port. Currently, prisoners, Judges and Court staff share hallways.

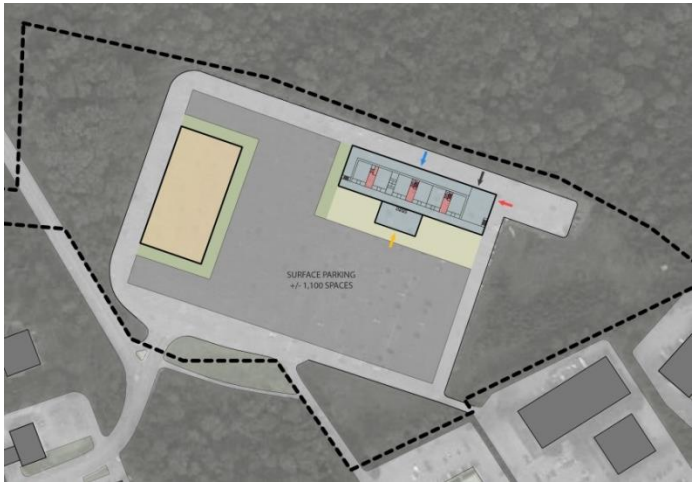
Project Purpose and Need

- **Space inadequacy & efficiency loss**:
  - The Circuit Court has been approved for a 6th judge but the courthouse does not have space to accommodate the need.
  - Courthouse areas do not have permanent telephone or network cabling due to building design and capacity limitation
  - Court rooms do not have areas that adequately address ADA concerns
  - The Jury Assembly room is too small to accommodate the larger selection pool required for some criminal cases thus requiring jury selection over two days.
  - Not all courtrooms are juried courtrooms requiring cases to be staggered.
  - Not all juried courtrooms have jury deliberation rooms further requiring the staggering of cases.
- **Ancillary programs** like Juvenile Services, Department of Social Services don't have dedicated space in the courthouse hampering their efficiency.
- **PREA**: Prisoner holding areas violate the Prison Rape Elimination Act (PREA).
- **Consolidation needs**: the consolidation of County legal services like land records, States Attorney's Office and Sherriff's Office would increase efficiencies.

Project Scope

New Courthouse

- A new courthouse is the only solution per an architectural and engineering study (appendix)



Site

Howard County Government Dorsey Building

9250 Bendix Road

Columbia, MD 21045

Scope

- 210,000 gsf of space with 600 space parking garage
- Demolition of existing Dorsey Building

Not included in scope

- Relocation of existing uses and services in the Dorsey building
- Any associated real estate developments on areas of the parcel beyond the envelope of the new courthouse and parking garage

Preliminary Project Costs and Assumptions

- $126 million construction cost based on 210,000 sf of space with 600 space parking garage
- Operations and maintenance (O&M), utilities, and other costs
- Term: 30 year for financing and O&M
- Courthouse CIP financing would be added as a one-time initiative on top of the typical level of County GO for CIP (approximately $95M per year in next 10 years)

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Definition of Public Private Partnerships (P3s)

A medium or long term contractual arrangement between a Public Agency and a Private Body for delivery of a public service or infrastructure for which the Public Agency remains accountable.

Where the required service or infrastructure is specified as an Output and significant risks are transferred to the private firm, making its private investment and financial returns linked to its performance.

P3s are procured through a competitive procurement process.

Understanding P3s

A P3 is:

- A risk sharing approach
- A lifecycle procurement approach that guarantees performance
- A transparent relationship

A P3 is NOT:

- Privatization
- A funding solution
- The right solution for every project (value-for-money analysis is critical)

Motivations for P3s

Realizing alternative financing for public investment projects

Getting better "Value-for-Money" from spending taxpayers' money

- Too much focus on realizing alternative financing can lead to low Value-for-Money (VfM). In other words, the deal may get done but it could be a bad deal from the perspective of the government and/or taxpayer.
- It is not about choosing one goal or the other, but aiming for creating VfM, while developing innovative financing solutions.

P3s let each partner focus on doing what it does best

Private

- Overall innovation, technology
- Professional management
- Design, Construct, Project Management
- Operational efficiency
- Maintenance and lifecycle optimization
- Financing

Private performance that is driven by profit / risk purpose …

… can create public value and benefits …

Public

- Securing the public interest
- Policy & planning
- Market management
- Competitive procurement
- Compliance management & regulation

… but only when the public manages the process effectively

Key P3 Value Drivers

Governance mechanism	Conventional delivery	P3 delivery
Integration and life cycle costing	Public entity integrates multiple contracts	One contract, private entity is integrator
Specifications allowing for innovation	Input specification, determining design and engineering solutions in detail	Output specification, allowing for creative solutions and life cycle costing
Financial incentives	The payment mechanism usually follows the cost structure of the contractor; for example: milestone payments	The payment mechanism is related to the output specifications and payments are therefore related to performance
Competition	Depending on the public entity, portions of the project can be insourced and are therefore not subject to a competitive bidding process	Competitive bidding for the entire contract
Efficient risk allocation	Risks are not always explicit; most risks are retained by the public entity	Risks are explicit and allocated according to the principle of “whoever is best able to manage the risk” will be responsible

P3 vs conventional delivery

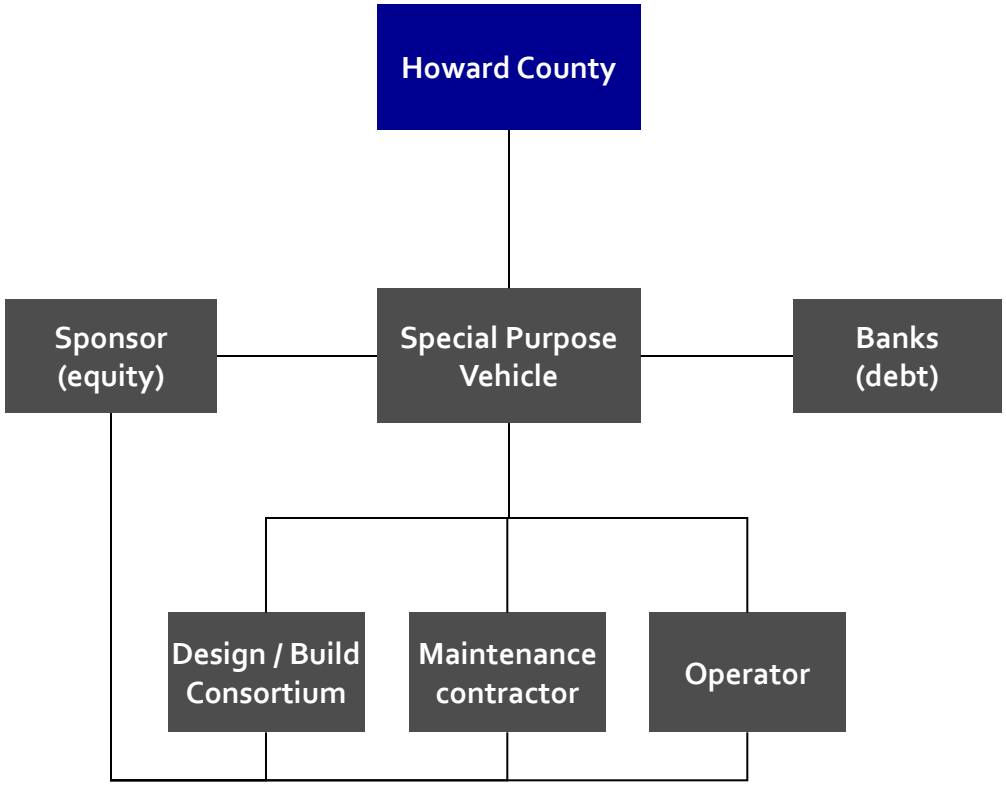
Country	Proportion of Projects Over Budget		Proportion of Projects with Schedule Over-runs	
	P3	Public	P3	Public
United Kingdom	35%	46%	31%	37%
Australia	4%	18%	1.4%	26%

Revenue-based P3s vs. Availability payment (AP) P3s

Revenue-based P3s	Availability Payment-based P3s
Private partner collects revenues directly from users	*Government pays private partner for services on behalf of users*
Characteristics • Private delivery of public service • User pays private partner • Shortfall paid by government (hybrid) • Emphasis on entrepreneurial freedom • Transfer of revenue risk	**Characteristics** • Private delivery of public service • Government pays private partner • Performance (availability) related payments • Emphasis on incentive structure • Transfer of performance risk
Project Examples	**Project Examples**
Traditional Toll Roads Energy/water companies Ports	DBFOM for transit, and roads Social infrastructure P3s
• US-36 Express Lanes Project, CO • I-95 HOV / HOT Lanes, VA	• Rapid Bridge Replacement, PA • Long Beach Court House, CA • Purple Line, MD

Typical P3 structure

- Under an AP P3, the public agency contracts with a single entity, the Special Purpose Vehicle (SPV), that takes full responsibility for the performance of a project – design, construction, financing, operations, and maintenance – for a long period of time.
- The SPV arranges financing for the capital investments and is compensated on the basis of its performance during the designated period.
- Potential advantages of this structure – other than higher value for money – are:
  - Level payment structure
  - Lifecycle cost savings
  - More assurances on timely project delivery



AP P3 is innovative, but not entirely new

- The following US projects are AP P3s:
  - Long Beach Court House - California
  - Presidio Parkway – California DOT (Caltrans)
  - Port of Miami Tunnel – Florida Department of Transportation (DOT)
  - I-595 corridor roadway improvements – Florida DOT
  - Ohio River bridges – East End Crossing – Indiana DOT
  - Goethals Bridge – Port Authority of New York & New Jersey
  - Denver Eagle project – Denver Regional Transportation District
  - Purple Line (light rail procurement phase) – Maryland DOT
- …and hundreds more projects, mainly in Canada, Australia and Europe.

P3 success factors

- Political will
  - P3 projects need champions
- Stakeholder involvement
  - Parties need to be invested in successful outcome
- Adequate legal framework
- Robust project preparation
  - Thorough feasibility analyses
  - Robust procurement strategy
  - High quality draft P3 contract
- Strong County credit
  - Courthouse availability payments to private party will rely on annual appropriations
- Appropriate risk allocation between County and private party
- Adequate monitoring framework
  - Procurement is measured in months; contract is measured in years

P3 suitability

Criteria	Key Question
Project Objective	Does the project involve the supply of a public service?
Project Type	Does the project allow a substantial transfer of risk to private sector?
Project Size	Does the size of the project justify the transaction costs?
Market Precedents	Does the P3 market have experience with similar projects?
Support	Is there sufficient support for P3 delivery?
Legal Authority	Can P3s be undertaken?
Institutions	Are there institutional structures in place to implement the P3?
Private Sector Appetite	Will there be sufficient private sector interest?
Finance	Is the project bankable? Do P3s generate net savings or efficiency gains?
Public Sector Capacity	Does the government have the required skills to procure and manage a P3?

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Differences between conventional and P3 procurement

Conventional Procurement	P3 Procurement
County prepares detailed specifications (inputs), for design and operation of the courthouse.	County focuses on functionality and defines what it wants to achieve from the courthouse (output specifications), e.g., capacity, security, amenities, etc.
Contractors submit bids for construction of the courthouse.	Developers are responsible for submitting proposals that include designing and building a courthouse that satisfies the County's output specifications.
County awards construction contract to lowest responsible bidder.	County awards long-term contract to Proposer that provides the most risk-adjusted Value-for-Money to the County.
County accepts completion of the constructed courthouse and assumes operating and maintenance responsibility, including costs and risks. Private party responsibility ends with delivery of constructed facility.	Private partner assumes design, build, finance, operate and maintenance responsibilities as well as a substantial portion of the associated risks. County monitors performance of the private partner for the life of the contract.

Four delivery models are being considered for the project

More Risks retained by Howard County

More Risks transferred to Private Partner

	Delivery Model	Details
1	Conventional delivery + Public Financing	• Design & Construct + Multiple short term O&M contracts • Public financing = 30-year General Obligation Bonds
2	Hybrid P3 One: Design, Build, Operate & Maintain + Public Financing	• Design, bid, build, operate and maintain • County provides financing with 30-year General Obligation bond at completion
3	Hybrid P3 Two: Design, Build, Operate & Maintain + Partial Public Financing	• Design, bid, build, operate and maintain • Combination of public financing with 30-year General Obligation Bonds, and private financing
4	Design, Build, Finance, Operate & Maintain + Full Private Financing	• Design, bid, build, operate and maintain • Full private financing

Payment mechanisms for each model

	Delivery Model	Payment Mechanisms
1	Conventional Delivery + Public Financing	• Typical payments to contractors during design, bid, build process
2	Hybrid P3 One: Design, Build, Operate & Maintain + Public Financing	• Milestone payments during construction • O&M payments
3	Hybrid P3 Two: Design, Build, Operate & Maintain + Partial Public Financing	• Milestone payments during design and build • Availability payments during O&M
4	Design, Build, Finance, Operate & Maintain + Full Private Financing	• Milestone payments during design and build • Availability payments during O&M

Definitions

Milestone Payments

Payments from the public entity to the private party during the construction of the facility

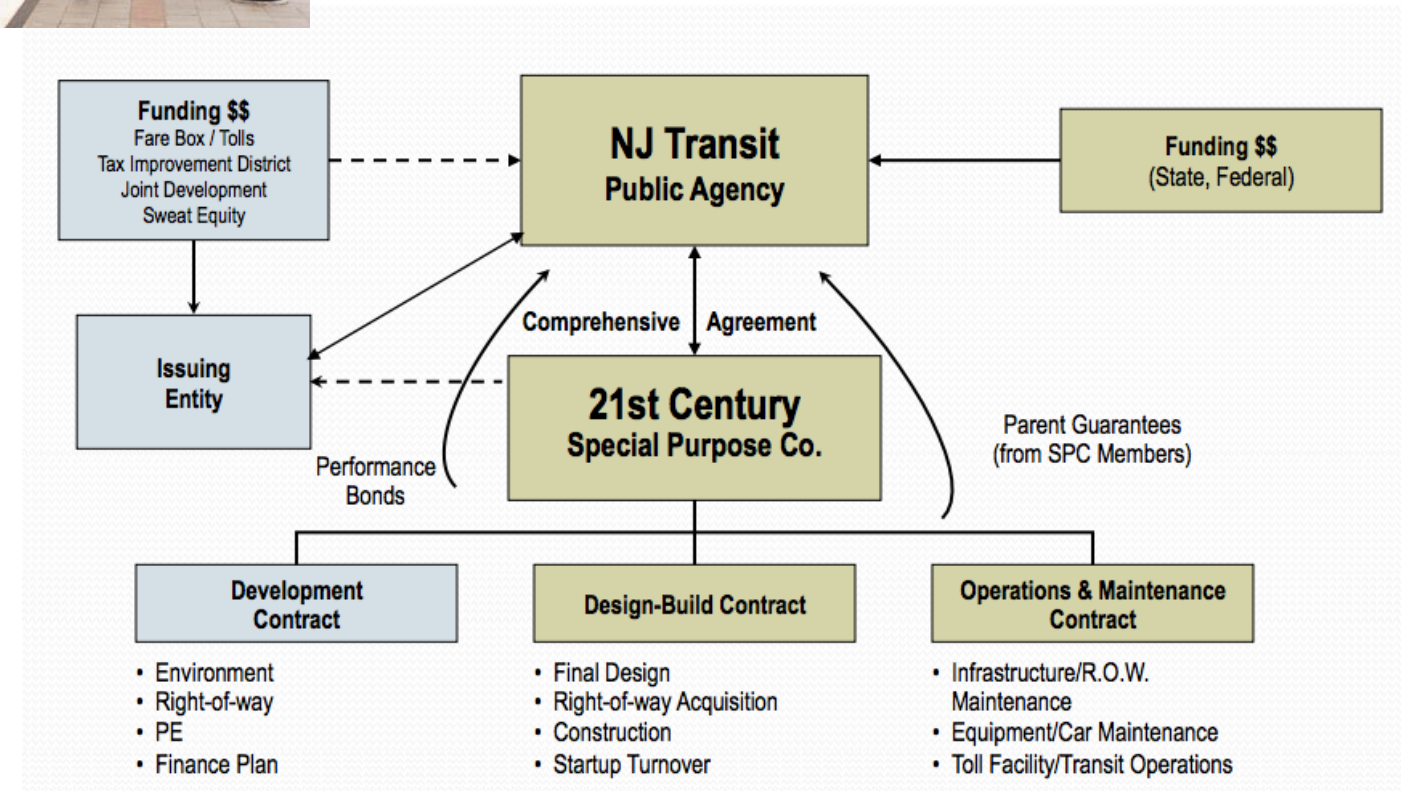
Availability Payments

Periodic payment from the public entity to the private party for making the facility available at agreed upon standards for the duration of the P3 contract

Hybrid Model 1: Hudson Bergen DBOM

Project Type	Light rail transit system
Project scope	Phase 1: 9.5-mile operating segment with 16 stations
Contract type	DBOM
Contract scope	Design, build, operations, and maintenance of Phase 1
Contract details	Fixed price contract to design and construct Phase 1 with a guaranteed completion date, provide a fleet of light rail vehicles, and operate and maintain the system for 15 years
Duration	15 year O&M
Year of completion	2000
Contract value	$1.6B
Value for money	Phase 1 Design Build completion with no claims, on time and on budget

Hybrid Model 1: Hudson Bergen DBOM



Hybrid Model 2: Ministry of Finance, The Netherlands

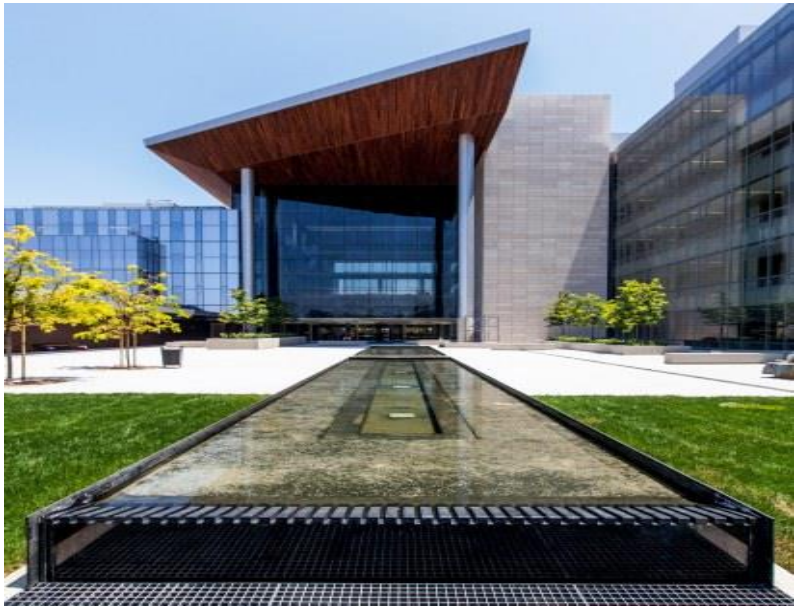
Building type:	Office building
Building size:	~700,000 sqft
Contract type:	DBFOM contract
Contract scope:	Design, build, finance, maintenance, and services
Services scope:	Catering, cleaning, security + additional
Duration:	25 years (after completion)
Year of completion:	2008
Contract value:	$ 220 M (NPV)
Value for money:	15% savings
	2 months early completion
	Budget certainty
	Higher quality of design & materials

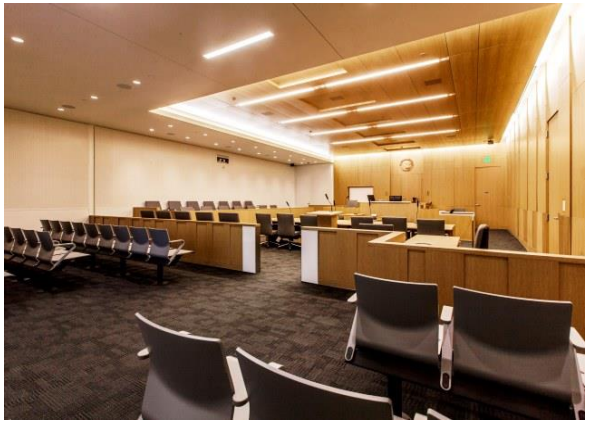
Hybrid Model 2: Ministry of Finance, The Netherlands

Full P3: Long Beach Court House

Building type:	Superior Court Building
Building size:	~500,000 sqft
Contract type:	DBFOM contract
Contract scope:	Design, build, finance, maintenance, and operation
Duration:	35 years (after completion)
Year of completion:	2013
Contract Value:	$ 720 M (NPV)
Value for money:	4% savings
	Timely completion
	Budget certainty

Full P3: Long Beach Court House





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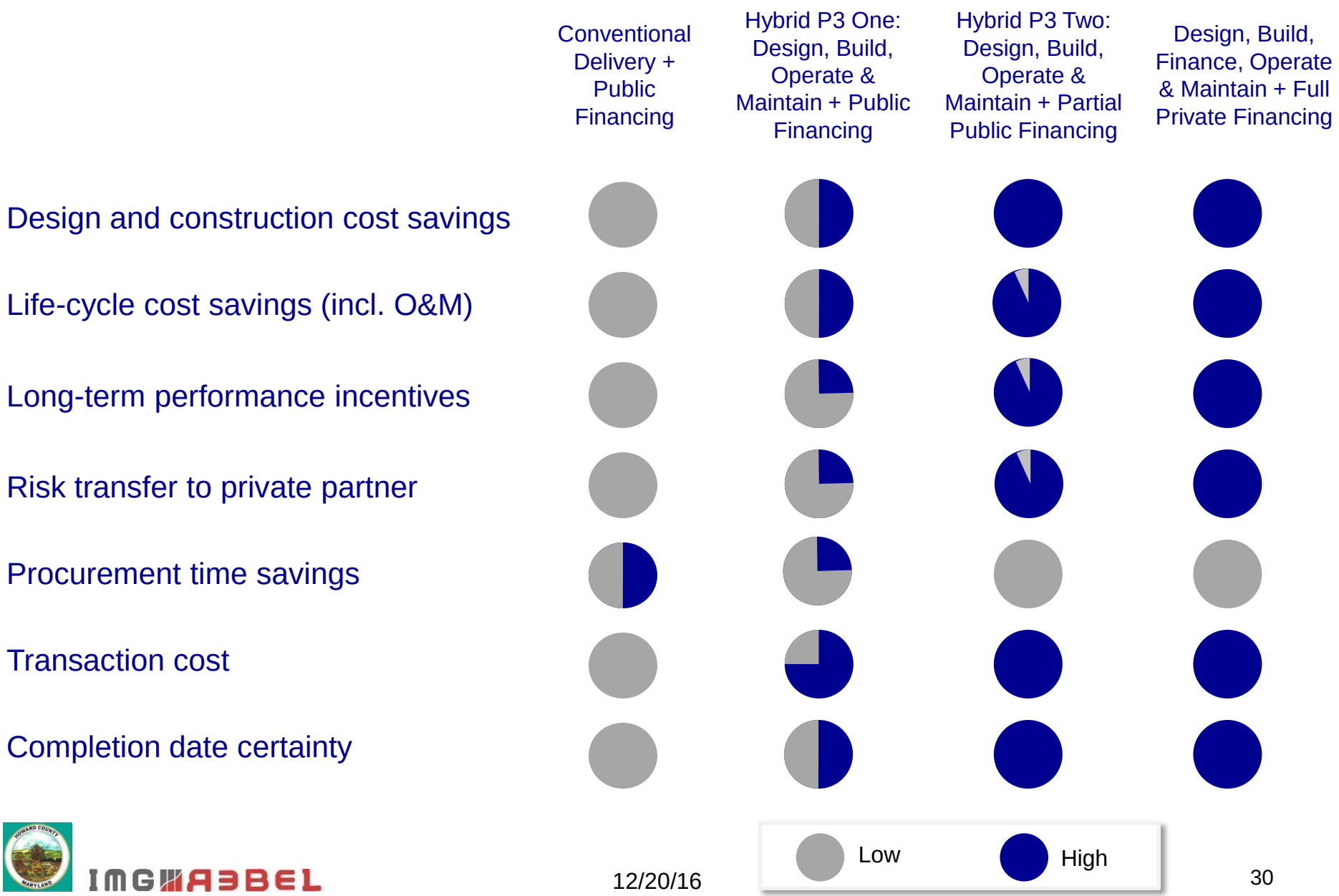
Initial comparison on delivery models



Pros / cons for each delivery model

	Delivery Model	Pros	Cons
1	Conventional Delivery + Public Financing	• Known process for Howard County • Attractive GO bond pricing	• No additional savings from P3 • No lifecycle cost savings • All project risks are retained by Howard County
2	Hybrid P3 One: Design, Build, Operate & Maintain + Public Financing	• Capture some cost efficiencies / assurance from P3 and some lifecycle cost savings • Attractive GO bond financing	• Longer procurement process
3	Hybrid P3 Two: Design, Build, Operate & Maintain + Partial Public Financing	• More “skin in the game” from private partner • Attractive GO bond financing • More risk transfer to private entity • More lifecycle cost savings	• Longer procurement process • Higher cost of capital
4	Design, Build, Finance, Operate & Maintain + Full Private Financing	• More “skin in the game” from private partner • More risk transfer to private entity • More lifecycle cost savings	• Longer procurement process • Higher cost of capital

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What's next? Subsequent analysis

	Financial Analysis	Risk Analysis	Value for Money Assessment
Definition	*Analysis of all the financial cash flows and risks of the Project*	*High-level assessment of project risks that are retained by the public, and transferred to the private partner*	*Qualitative and quantitative comparison of delivery methods*
Approach	✓ Review all prior data available ✓ Confirm data, including finalizing cost data as applicable ✓ Build/revise financial models	✓ Identification of all key project risks ✓ Allocation of project risk to the party that can best manage the risk ✓ Risk valuation	✓ Identify qualitative differences between delivery models ✓ Quantify and monetize differences between delivery models ✓ Compare delivery models on all financial cash flows and risks as well as non-quantifiable differences

What's next? Subsequent analysis (continued)

	Annual operating budget impact analysis	Key debt indicators analysis	Bond rating implications
Definition	*Analysis of different options' annual operating budget impact*	*Show projected values of key debt indicators for the four options in comparison to a base scenario*	*Discuss and go over each option's potential implication on County bond ratings*
Approach	For each option, ✓ Understand the components of the annual cost to the county ✓ Understand the size of annual budget needs and as a share of total budget ✓ Understand the annual increase	✓ Review all four debt indicators with a focus on two indicators used by credit rating agencies ✓ Show projected debt indicators for each option as well as a base scenario ✓ Check the projected debt indicator values against County's only policy target and typical triggers used by credit rating agencies	✓ Discuss general credit rating framework ✓ Discuss listed options' potential implications on bond rating

Spending Affordability Advisory Committee Meetings

12/20:

- Introduction of the courthouse project, project needs and scope, understand P3s in general (form, usage, pros and cons, business process), high-level discussion of the options being studied, analytical framework, and P3 examples
- Collect questions and feedbacks from the committee

1/11:

- Present quantitative analysis including financial models for four options, associated budget impact and debt indicator performances and bond rating implications; detailed analysis of risks, money for return, and project schedule.
- Discuss pros and cons & preliminary recommendations
- Provide responses to questions from first meeting
- The committee discuss recommendations and information to include in the report

1/18

- Present revised models and final analysis incorporating feedbacks
- The committee discuss recommendations and reviews draft report (if available)

1/23

- The committee finalizes the report and provides it to County Executive

APPENDICES

Alternative considerations

Typical P3 Process

P3 Value Drivers

Value for Money Assessment

Alternative considerations: Addition and other sites

The County completed an architectural and engineering study to see if an addition was possible and concluded that a new courthouse is needed based on the findings below:

- While an addition provides more space it will not provide the space required to meet the 20 year need and it would not allow for the consolidation of all court programs back into the courthouse.
- Any addition requires the demolition of the Emory Street Jail.
- Any addition requires renovation of existing court space, requiring the creation of temporary court space at another location.
- Construction on the confined site with the current granite substrate will be expensive and disruptive to ALL surrounding buildings and the courthouse.

Two County Sites were Evaluated

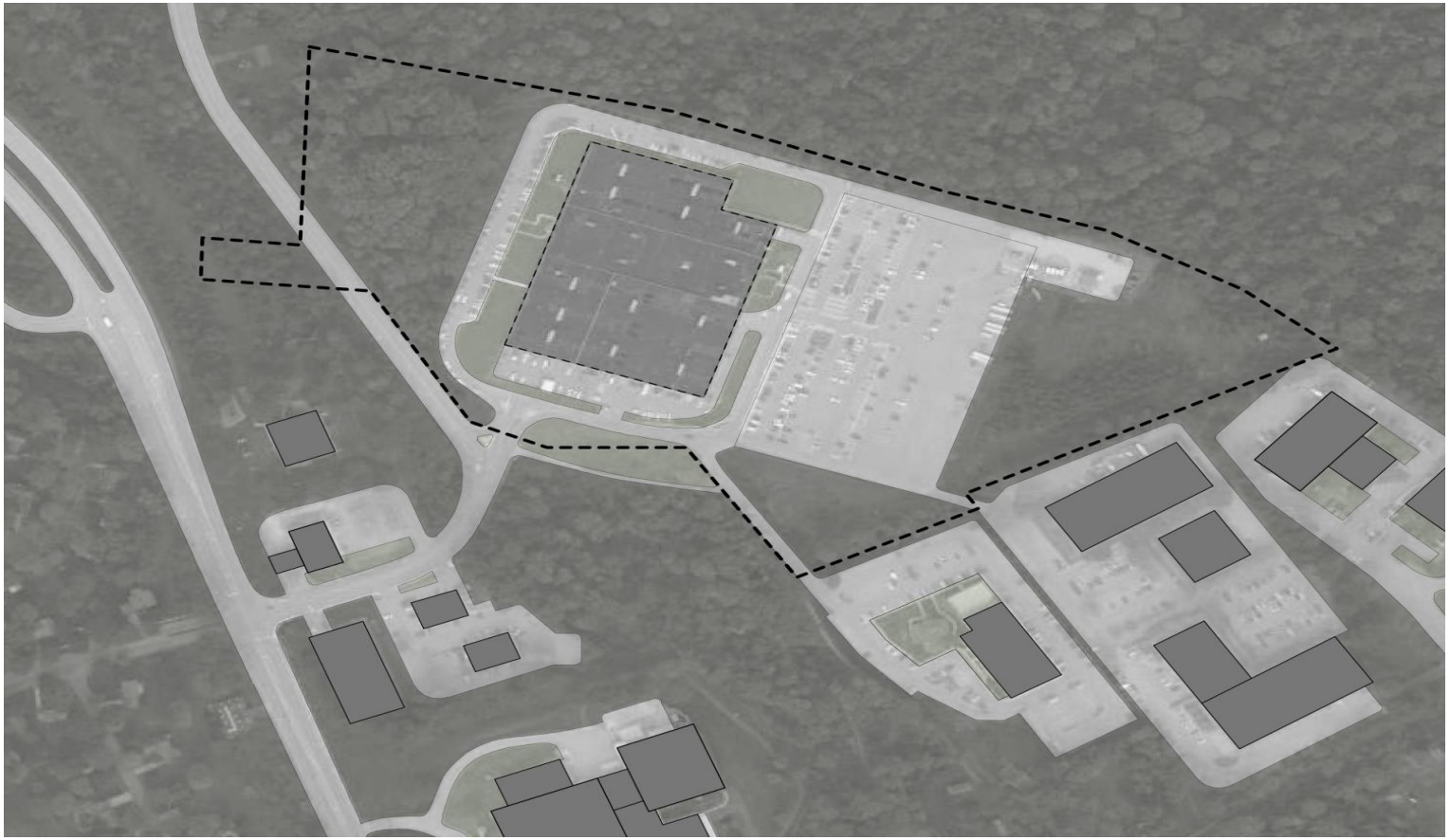
The First County site evaluated was the site close to the District Court.

But the site presents several challenges.

- Topography
- Wetlands
- Useable area.
- Cost

Two County Sites were Evaluated

The Second County site evaluated was the site of the Dorsey Bldg.



Two County Sites were Evaluated

A 208,000 sf courthouse, a 200,000 sf office building and 700 surface parking spaces fit on the site.

Commercial Sites Were Considered

Parcel A 9.55 acres
Parcel B 8.99 acres
Parcel C 5.90 acres

Total +/-24.45 acres

But Commercial Sites bring challenges the County Sites don't:

- Cost of acquisition.
- Restricted area of site.
- Neighbors.

Conclusion: The Dorsey Site is the best alternative

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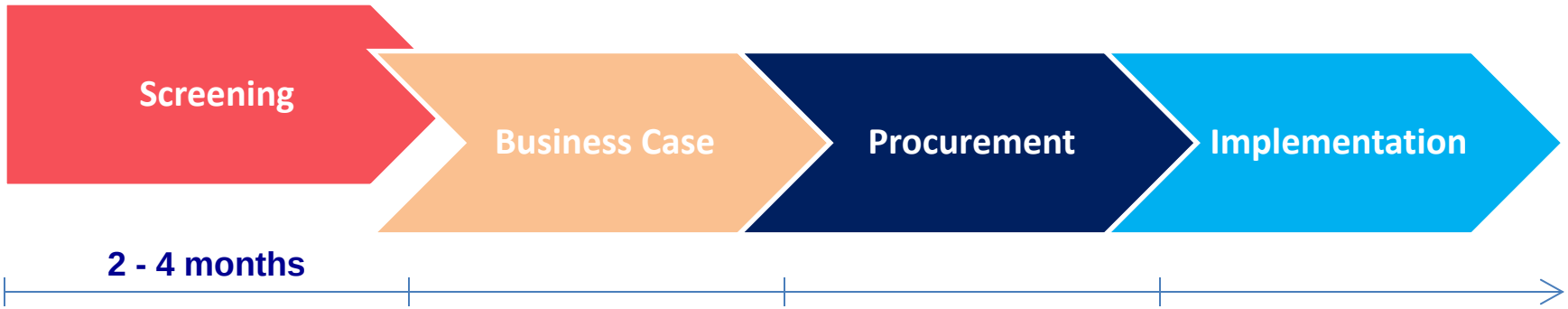
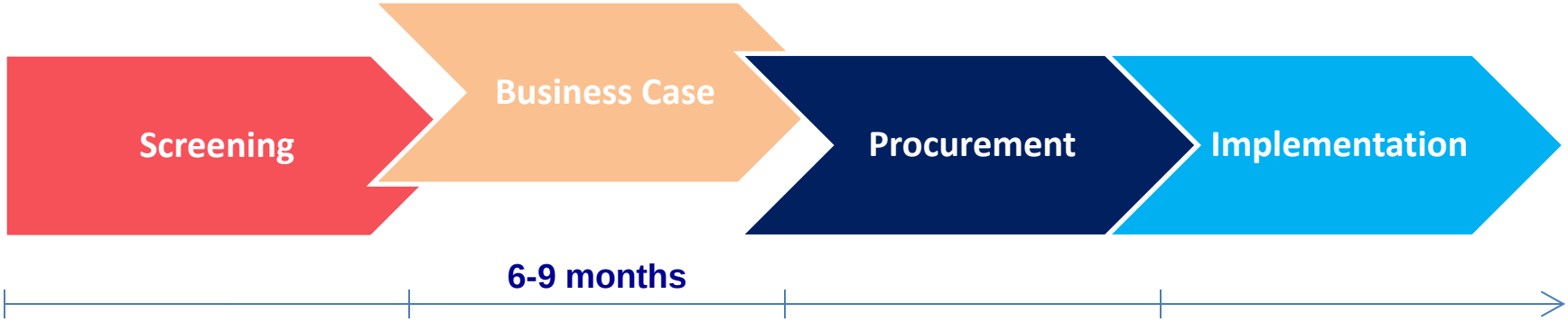
P3 Screening



- Objective: Determine if projects meet basic P3 criteria and hold potential for delivering value-for-money
- Activities:
  - Project identification
  - Project scoping
  - Project screening

P3 Business Case

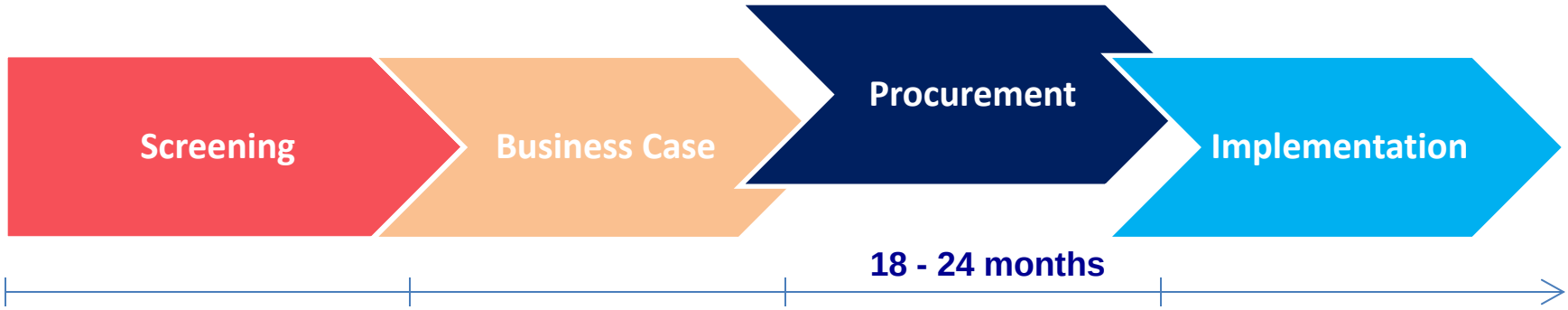


- Objective: Fully analyze project feasibility & VfM assessment
- Activities:

  Market study
  Legal feasibility
  Technical feasibility
  Risk identification & allocation
  Value-for Money analysis
  Affordability analysis
  Develop contracting strategy

- Deliverables: Business case, including procurement plan & schedule

P3 Procurement Preparation & Procurement

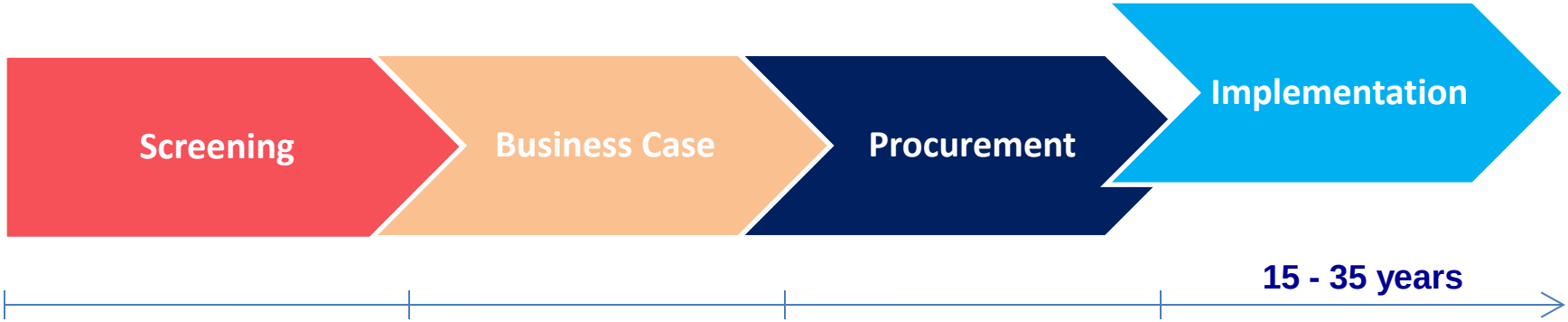


- Objective: Competitively select the private partner that delivers the best value-for-money
- Activities:

Determine evaluation criteria	Pre-qualification
Draft procurement documents	Request for proposals
Draft P3 contract	Evaluate bids & Select preferred bidder
Market sounding	Contract & financial close

- Deliverables: Procurement documents and contract

P3 Implementation



- Objective: Efficiently and effectively deliver the specified outputs over the life of the agreement
- Activities:
  - Monitor compliance with contractual obligations
  - Manage changes
  - Asset transfer (handback)
- Deliverables: Periodic status reports

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Alternative considerations

Typical P3 Process

P3 Value Drivers

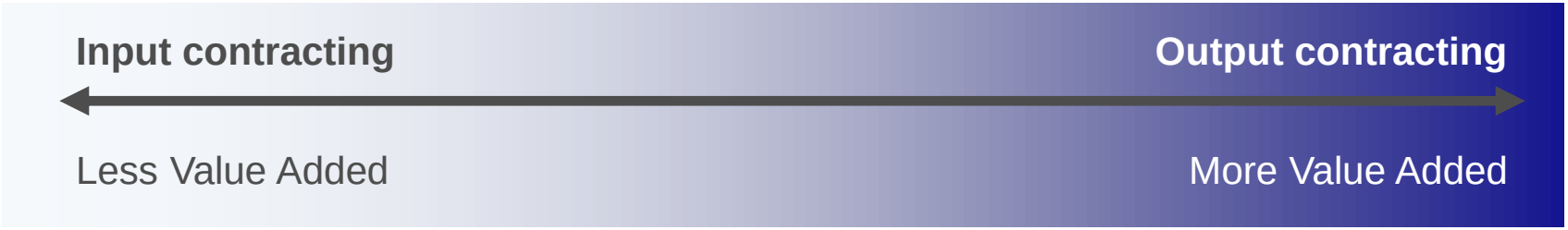
Value for Money Assessment

Value driver 1: Integration and life cycle costing

- Large and long-term P3 contracts integrate different components and phases of public service delivery.
- This allows the contractor to minimize interface problems and optimize life cycle costs and quality of service.
- For social infrastructure this effect typically is even bigger because of the integration of ‘hard services’ and ‘soft services’.

Value driver 2: Specifications allowing for innovation

- Output-based contracting leaves room for the private sector to decide how to deliver the envisaged services.
- Under competitive pressure this leads to creative solutions, life cycle cost savings and better quality of service.
- Setting long-term performance requirements turns out to be difficult.
- If the specifications are not structured well, the payment mechanism does not work either and the service will be low.
- As in other delivery methods, changing the requirements comes at a cost.



Value driver 3: Financial incentives – Evaluation criteria

- In a competitive process the goal of all bidders is to win. Bidders can win if they score best on the evaluation criteria.
- In other words, the evaluation criteria can be used to focus the bidders on the public sector objectives.
- In order to do that, evaluation is not just price-based, but value-based (economically most advantageous bids).
- There are several systems of including quality of services and risk allocation in the evaluation criteria.
- Complicated and opaque evaluation criteria do not point bidders in the right direction and can lead to unexpected results.

Value driver 3: Financial incentives – Payment mechanism

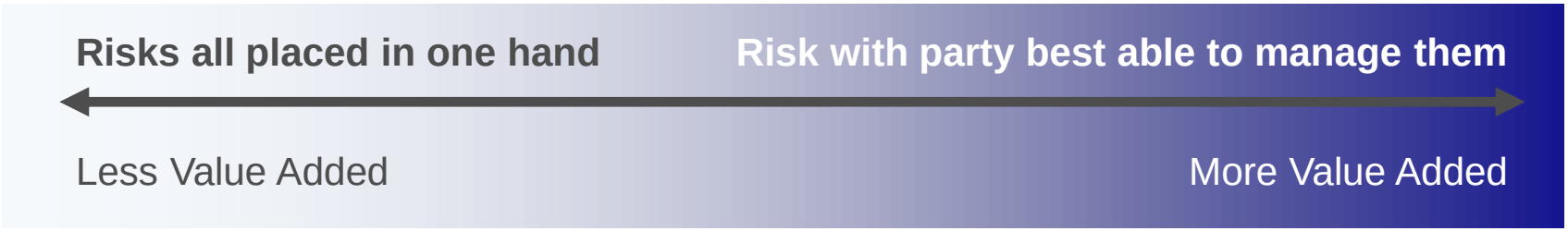
- The private sector can best be incentivized through both carrots and sticks, aligning public and private interests.
- Poor performance should trigger penalties, which will suppress the private sector's financial performance.
- Good performance improves the private sector's profits directly (through higher payments) or indirectly (through lower costs).
- Such penalties should be set to tickle, then hurt, but not kill a private operator.
- Key is the financing component in P3 deals, making sure that the contractor has ‘money at stake’.

Value driver 4: Competition

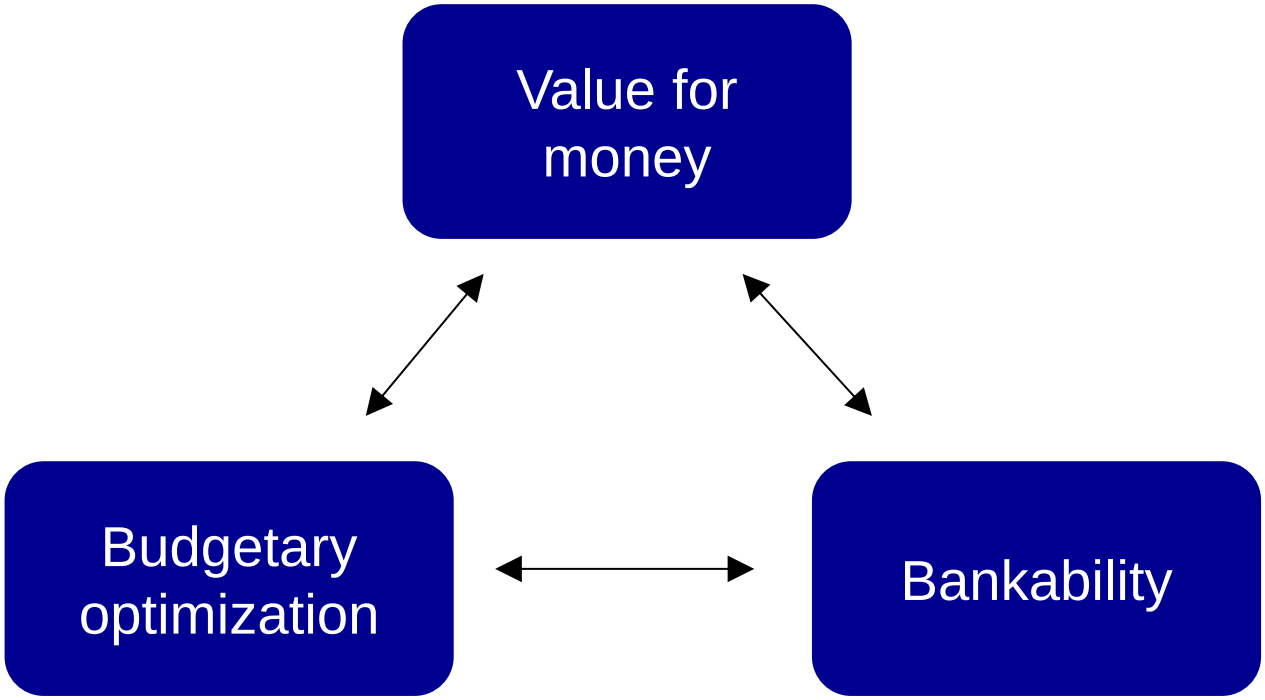
- The benefits of a P3 will only materialize if there is market appetite and market capacity.
- This creates a competitive environment for procuring the public service.
- Competition for P3 projects is typically different from competition for conventional projects.
- The expected transaction costs and shortlisting procedure affect the market appetite, so procurement strategy does matter!

Value driver 5: Efficient risk allocation

- Risk allocation is at the core of P3 deal: the P3 contract is all about the risk allocation (different from conventional).
- The private sector should be able to take responsibility for the delivery of a public service (i.e. take on the operating risks).
- The private sector is not willing to take just any risks, for example sovereign risks, and sometimes not revenue risks.
- Risk allocation based on the principle that the party best able to manage these risks should indeed bear them increases VfM.



Value driver 5: Efficient risk allocation – Conflicts



Risk attitude

Allocation of project risks to those parties best able to manage them

Low risk to private sector, high risk to public sector

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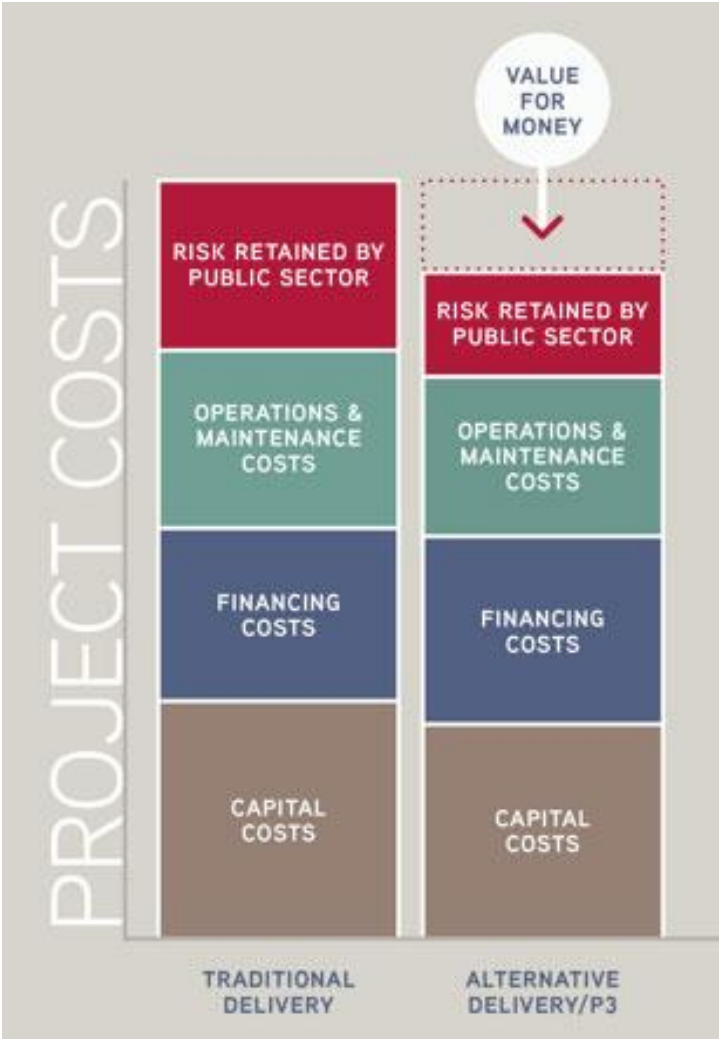
Typical P3 Process

P3 Value Drivers

Value for Money Assessment

Value for Money

- Pursue P3 projects if they deliver better value-for-money (VfM) than conventional public delivery.
- VfM = combination of the price, quality, quantity, timeliness, risk of the P3 project.



VfM assessment helps identify the optimal delivery method

- The VfM concept is used to compare P3 and conventional delivery methods for the same investment project.
- VfM assessment comes down to a comparison of the NPV of (expected) cash flows of the P3 and conventional approaches.
- VfM assessment:
  - Answers the question, “Which delivery method provides the ‘best deal’ for implementing a specific project from the perspective of the government?”
  - Should create an understanding of the differences between the P3 and conventional delivery methods
  - Contributes to a better understanding of the potential value-driving mechanisms of the P3 option
  - Provides decision makers with better information to determine and optimize all of the project delivery alternatives

VfM assessment helps identify the optimal delivery method

- IMG Rebel developed a state-of-the-art VfM assessment methodology for FHWA: (http://www.fhwa.dot.gov/ipd/p3/toolkit/publications/index.htm).
- We will apply many elements of the VfM framework and will build upon experience with previous P3 projects.
- The following analysis is a preliminary VfM assessment and is comprised of the following:
  - A qualitative discussion of the structural differences between P3 and conventional approach
  - A qualitative comparison of key financial elements on the basis of similar P3 projects
  - An indicative quantification of the expected differences on the basis of similar P3 projects.